

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY
(PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/GB2005/001231

International filing date (day/month/year)
30.03.2005

Priority date (day/month/year)
30.03.2004

International Patent Classification (IPC) or both national classification and IPC
C08L67/02, C08K3/08, B29C49/00, C08J3/20

Applicant
COLORMATRIX EUROPE LIMITED

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☒ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office
D-80298 Munich
Tel. +49 89 23999 - 0 Tx: 523656 epmu d
Fax: +49 89 23999 - 4465

Authorized Officer

Frison, C

Telephone No. +49 89 23999-8519



**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/GB2005/001231

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating there has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

Box No. II Priority

1. ☒ The validity of the priority claim has not been considered because the International Searching Authority does not have in its possession a copy of the earlier application whose priority has been claimed or, when required, a translation of that earlier application. This opinion has nevertheless been established on the assumption that the relevant date (Rules 43bis.1 and 64.1) is the claimed priority date.
2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43bis.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.
3. Additional observations, if necessary:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/GB2005/001231

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | |
|-------------------------------|-------------|------|
| Novelty (N) | Yes: Claims | |
| | No: Claims | 1-48 |
| Inventive step (IS) | Yes: Claims | |
| | No: Claims | 1-48 |
| Industrial applicability (IA) | Yes: Claims | 1-48 |
| | No: Claims | |

2. Citations and explanations

see separate sheet

Box No. VI Certain documents cited

1. Certain published documents (Rules 43bis.1 and 70.10)

and / or

2. Non-written disclosures (Rules 43bis.1 and 70.9)

see form 210

Concerning point V

Document cited in the search report

- D1: EP-A-0 429 311 (IMPERIAL CHEMICAL INDUSTRIES PLC) 29 May 1991
(1991-05-29)
D2: US-A-4 420 581 (MCFARLANE ET AL) 13 December 1983 (1983-12-13)
D3: US-A-4 408 004 (PENGILLY ET AL) 4 October 1983 (1983-10-04)
D4: US 2004/180159 A (NEAL MICHAEL A ET AL) 16 September 2004 (2004-09-16)

1. Document D1 recites packaging materials (eg. bottles) comprising a thermoplastic polymer composition based on polymer and metal particles which intrinsically absorb radiation in the wavelength region 500 nm to 2000 nm. The particles have the effect of decreasing the reheat time of the polymer (claim 1). Examples of metal particles are given p. 2, l. 54-56 and include antimony, tin, copper, silver, gold, arsenic, cadmium, mercury, lead, palladium and platinum. In the examples the metal is comprised in ethylene glycol.

As a result, the subject-matter of the independent claims 1-3, 7, 40 is not new over D1 (Art. 33(2) PCT).

Document D2 describes a polyester molding (blow molding, bottles) composition containing from 1 to 300 ppm of iron oxide in order to reduce the heat up time of said polyester (see cited passages in the search report). A carrier (ethylene glycol) is used in the examples.

As a result, the subject-matter of the independent claims 1-3, 7 is not new over D1 (Art. 33(2) PCT).

Document D3 recites a polyester for molding comprising carbon black or antimony (see claims 1, 9) for improved heat up rates of said polyester. The carbon black or antimony are suspended in ethylene glycol suspension (see Table 1).

As a result, the subject-matter of the independent claims 1-3, 7 is not new over D3 (Art. 33(2) PCT).

Document D4 deals with bottles, containers formed from polypropylene and including a reheating agent such as antimony, manganese, copper, graphite, carbon black or titanium (see § [56]). Document D4 has been published between the claimed priority date and the filing date of the present application. This document would be novelty destroying for many of the claims in case the priority date of the present application is not valid. In order to allow the examining division to check the validity of the claimed priority, the applicant is requested to send a copy of the priority document.

2. Miscellaneous

The applicant's attention is drawn to the fact that in the European phase, claims would be objected for lack of clarity, the reasons are the following:

Claim 1: the applicant has to choose whether the claim should be drawn as product claim or use claim. The features "for improving the reheat characteristics .." are use features and are thus not taken into considerations for assessing novelty.

Claim 16: it is impossible to compare what is claimed in claim 16 to the teaching of the prior art. A claim should only be directed to one category, and therefore can not be directed to "A composition, use, formulation, method" as expressed in claim 16. The same applies to all claims beginning with the same wording.